Reply Comment on ET Docket 04-37. Submitted by R.L.Holtz, Extra class amateur radio licensee, callsign AI4CB.

This is a Reply Comment to the "Comments of Current Technologies, LLC" filed May 3 2004. On pages 17-18 of their Comment, Current makes the following statement:

> "The interference potential of even a city-wide system consisting of Current Technologies' BPL equipment is no worse than widely scattered unintentional emitters of the kind found in every home and office. … If the more alarming interference scenarios described in the NOI docket had any validity, then the proliferation of cash registers, PCs, hair dryers, and untold millions of other emission sources would have shut down radio communications long ago."

There are several important differences between a BPL system and these other isolated devices that Current conveniently ignores:

- Generally, these various emitters are well *below* Part 15 emissions limits and are a problem only when relatively close by, in particular within my own home. On the other hand, the NTIA report has shown conclusively that BPL systems operating at Part 15 limits create severe interference for hundreds of meters from the source.
- Generally, these common household devices do indeed act as point sources because they are small and self-contained. Thus the sources in my neighbor's homes generally are not problems for me because of the distances in addition to the low emissions. However, the NTIA report has shown conclusively that, despite the unsupported assertions by various BPL providers to the contrary, the power lines of BPL systems indeed are line radiators, and the fields fall off much more slowly than a point radiator.
- Various digital emitters in the home such as ethernet hubs, switching power supplies, CRT monitors, etc., typically emit at discrete, widely separated frequencies and harmonics. It is possible, if necessary, to operate between interfering emissions. BPL systems on the other hand will emit closely packed discrete frequencies throughout the entire HF spectrum.

Amateurs routinely deal with interference from all sorts of devices and there are ways to mitigate interference from short-range, weak, spectrally confined emitters commonly found in the home. CRT computer monitors can be replaced with LCD monitors. Ethernet routers can be shielded and shielded cabling used. Touch lamps can be unplugged. We can use the electric bread machine or run the clothes dryer when we do not need to operate. Most such emitters located in neighboring homes typically are much weaker due to the distance, much less of a problem, and in many cases either can be dealt with in a neighborly way, or can be lived with.

In the case of BPL, however, the amateur cannot control the interference and instead must rely on the party causing the interference to act in good faith to eliminate the problem. As Current and other BPL providers have alluded to, acting in good faith to eliminate interference, or using sound engineering practice to prevent or reduce it, impacts their profitability. So, is it any surprise that amateurs are skeptical that BPL providers will eliminate interference voluntarily?

Thus it is disingenuous for Current to suggest that surrounding my home with line-source radiators operating at arbitrary emission levels up to Part 15 limits, are in any way "no worse" than the few weak point sources that might exist in my home that I can turn off myself.